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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,629	10/18/2000	Delos C. Jensen	6647-16	4392

7590 09/07/2004

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EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

4

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691,629

Applicant(s)

JENSEN ET AL.

Examiner

Michael N. Opsasnick

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2.3</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page1 of the specification, the serial number for the referred to application “A METHOD AND MECHANISM FOR THE CREATION, MAINTENANCE, AND COMPARISON OF SEMANTIC ABSTRACTS” is missing (on line 10 and 24). Please fill in the appropriate serial number (examiner notes that one possible serial number is 09/615726; please check and verify).

Appropriate correction is required.

On page 1 of the specification, line 9, applicants claim that the current application is a continuation in part of a US Patent Application. However, there is no record of this C-I-P in neither the Oath/Declaration of this application, nor the assumed 09/615726 application. Therefore, removal of the language “this application is a continuation in part of” is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,3-7,9-14,16,17,19-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gillis (6523026).

As per claims 1,7,13, Gillis (6523026) teaches a computer implemented method of constructing a single vector representing an abstract pertaining to the semantic content of a document (col. 1 lines 10-22; as a semantic representation -- fig. 4) comprising:

“storing a semantic content.....system” as storing the semantic document (col. 40 lines 52-62)

“constructing state vectors....semantic content” as constructing term vectors (col. 41 lines 15-25)

“superpositioning.....vector” as adding the vectors into one (col. 41 lines 22-26)

“storing.....document” as storing the abstract representations (abstract)

As per claims 3,9,16, Gillis (6523026) teaches vector addition/summations (col. 41 lines 23-26)

As per claims 4,10,17, Gillis (6523026) teaches vector weighting (col. 41 lines 38-41)

As per claims 5,11, Gillis (6523026) teaches normalization (col. 41 lines 23-26)

As per claims 6,12, Gillis (6523026) teaches storing the document in the corpus (col. 36 lines 12-15); word extraction (as searching based on terms—col. 35 lines 60-65); constructing state vectors (as constructing the vector and updating -- col. 36 lines 17-22); and filtering the state vector(col. 36 lines 50-65)

As per claim 14, Gillis (6523026) teaches calculating a threshold distance as part of the vector, measuring a distance to a second semantic abstract and comparing to the first semantic abstract, and retrieving the second document (Fig. 1D, wherein term vector and document vectors are measure for vector similarity (subblock 18), then used with query vectors (15), to retrieve the relevant text and documents (19, 20).

As per claims 19-21 Gillis (6523026) teaches construction of minimal vectors representing an abstract pertaining to the semantic content of a document (col. 1 lines 10-22; as a semantic representation -- fig. 4) (both for computer implementation and software – fig. 1a, subblock 6; and fig 1 as the apparatus) comprising:

“storing a semantic content.....system” as storing the semantic document (col. 40 lines 52-62)

“constructing state vectors....semantic content” as constructing term vectors (col. 41 lines 15-25)

“locating clumps of state vectors.....space” as clusters d(S) and d(T) in fig. 3a

“superpositioning.....vector” as adding the vectors into one (col. 41 lines 22-26)

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“collecting the single vectors.....clump” as reducing the domain to a minimum required number of sets (col. 58 lines 50-65).

“storing.....document” as storing the abstract representations (abstract).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2,8,15,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillis (6523026) in view of Komissarchik et al (5799276).

As per claims 2,8,15, and 18, Gillis (6523026) does not explicitly teach the use of the identification of lexeme phrase, vectors, and representation in the semantic content for further filtering and storage of such information, (Gillis (6523026) teaches semantics, as noted above, but is silent on lexeme information); however, Komissarchik et al (5799276) teaches ascribing additional grammatical information as part of the features, especially lexeme information (col. 38 lines 41-50). Therefore, it would have been obvious to one of ordinary skill in the art of dictionary building to modify the teachings of Gillis (6523026) with adding lexical information as one of the vector feature to track for comparisons because it

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would advantageously provide additional weighting to words/phrases that appeared more often in the dictionary, and therefore aiding in the recognition process (Komissarchik et al (5799276), col. 38 lines 53-55).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

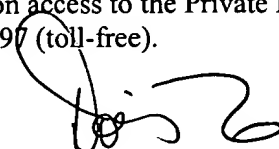
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mno
8/28/2004



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